

REMARKS

We have carefully considered the Advisory Action dated May 17, 2005, in which each of the pending claims is rejected over a combination of United States Patent 6,389,016 to Sabaa et al. and United States Patent 6,134,237 to Brailean et al. We have amended certain claims to more particularly point out that at least one portion of a packet sequence number of a transmitted packet is set to a value that, when processed in a predictable manner at a receiving station, produces a corresponding acknowledgement sequence number that identifies the data segment to be transmitted in a next data packet. When the acknowledgment sequence number is then returned to the transmitting station, the transmitting station uses the number to determine which data to next transmit. Thus, in contrast to known prior systems, the transmitting station of the current system need not maintain records to specify the data to next transmit.

In particular, we have amended claims 1, 9 and 17 to more particularly point out that transmitting device determines from the acknowledgement sequence number an offset to the segment of the data in the file that is to be next transmitted. Thus, the transmitting device need not maintain a pointer to the next data to be transmitted, and instead uses the information in the corresponding acknowledgement sequence number to identify the next data to transmit from the file. This is in contrast to Sabaa, which does not send corresponding acknowledgment packets, and thus, can not identify the next data to transmit without keeping records.

Further, the Brailean patent describes a system in which acknowledge packets are sent, however, the acknowledgement packets include a “receive tracking number” that indicates the packet sequence number of the data packet that the receiving device expects to receive next, where **“the next packet to be received may or may not be the packet next in sequence to the packet most recently received.”** (column 9, lines 5-7). Accordingly, the transmitting device can not necessarily determine from the receive tracking number which data to transmit next. Thus, as in the Sabaa system, the transmitting device of Brailean must maintain records, e.g., pointers to keep track of what data to transmit next.

A combination of the teachings of the Sabaa and Brailean references adds to the Sabaa system acknowledgment packets that contain the receive tracking numbers. As described, the transmitting station checks that the received tracking number is less than or equal to the present transmit tracking number, i.e., the number of the packet to be transmitted next, and determines that no communication error has occurred if the received tracking number is less than or equal to the present transmit tracking number. Thus, there is no teaching or suggestion in the combination that the tracking number sent back to the transmitting station in the acknowledgement packet specifies an offset to or can be used to determine or identify the data that are to be included in the next packet for transmission.

If the combination instead included the group and sequence numbers of Sabaa in the acknowledgement packets, the protocol would have to be amended to allow the user data portion of the acknowledgement packet to include the group number in a predefined

position in the user data (column 5, lines 50-57), or both the sequence number and the group number in the predefined position in the user data (column 6, lines 39-48). Accordingly, the receiving device must take steps to alter the data portion of the acknowledgement packets to include therein at least information relating to the group number of the packet just received or the group number of the packet that is expected to be received.

In contrast to the teachings of Sabaa and Brailean and any combination thereof, a receiving device in the current system processes every acknowledgement packet in the same manner, and yet produces the data identifying information. The current system thus does not require a group number or a receive tracking number or require such numbers to be supplied in predefined locations in the user data in order to provide to the transmitting station information from which the station can determine which data to include in the next packet. Instead, the current system selectively sets the particular portion of the packet sequence number that is contained in the packet sequence number field of the transmitted packet to a value that enables the transmission of the data-identifying information back to the transmitting station in a predictably processed acknowledgement packet. There are thus no changes required in the operations of a receiving device in order to convey the data-identifying information back to the transmitter. Further, as discussed, the current system may operate without requiring the transmitting device to maintain records, e.g., pointers, that are otherwise required to identify the next data for transmission.


Accordingly, the combined teachings of the Sabaa and Brailean system do not teach or suggest the current system because, *inter alia*, the combination does not teach or

suggest a system in which at least one portion of a sequence number identifies a particular segment of data within a file or a data stream such that when a receiving device predictably processes the sequence number to produce a corresponding acknowledgement packet, the transmitting station can determine from the sequence number in the acknowledgement packet which data to transmit in a next packet. Accordingly, the combined teaching do not teach or suggest the invention as set forth in independent claims 1, 9, 17, 25, 26, 29, 32, 35, 37, 39 and 41, as amended, and the claims that depend therefrom.

The claims, as amended, should be in form for allowance. We respectfully request that the Examiner reconsider the rejections and issue a Notice of Allowance for all pending claims.

Please charge any fee occasioned by this paper to our Deposit Account
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Respectfully submitted,

A handwritten signature in cursive script, reading "Patricia A. Sheehan", written in black ink.

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